

Title (en)
NITROGEN-CONTAINING ALLOY AND METHOD FOR PRODUCING PHOSPHOR BY USING THE SAME

Title (de)
STICKSTOFFHALTIGE LEGIERUNG UND DEREN VERWENDUNG ZUR HERSTELLUNG VON PHOSPHOR

Title (fr)
ALLIAGE CONTENANT DE L'AZOTE ET PROCÉDÉ DE PRODUCTION DE LUMINOPHORE L'UTILISANT

Publication
EP 2022834 A1 20090211 (EN)

Application
EP 07743638 A 20070518

Priority

- JP 2007060203 W 20070518
- JP 2006140557 A 20060519
- JP 2006153632 A 20060601
- JP 2006184667 A 20060704
- JP 2006267714 A 20060929

Abstract (en)
There is provided a method for industrially producing a phosphor with high performance, in particular, high brightness. There is also provided a nitrogen-containing alloy and an alloy powder that can be used for the production method. A method for producing a phosphor includes a step of heating a raw material for the phosphor under a nitrogen-containing atmosphere, in which an alloy containing two or more different metal elements constituting the phosphor is used as the whole or part of the raw material for the phosphor, and in the heating step, the heating is performed under conditions such that the temperature change per minute is 50°C or lower. It is possible to suppress the rapid progress of a nitridation reaction in heat treatment in producing the phosphor using an alloy for a phosphor precursor as the whole or part of the raw material, thereby industrially producing the phosphor with high performance, in particular, high brightness.

IPC 8 full level
C09K 11/08 (2006.01); **C09K 11/64** (2006.01)

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C04B 35/581 (2013.01 - EP US); **C04B 35/5935** (2013.01 - EP US); **C04B 35/597** (2013.01 - EP US); **C04B 35/6261** (2013.01 - EP US); **C04B 35/6262** (2013.01 - EP US); **C04B 35/62675** (2013.01 - EP US); **C04B 35/6268** (2013.01 - EP US); **C04B 35/6455** (2013.01 - EP US); **C09K 11/08** (2013.01 - KR); **C09K 11/0883** (2013.01 - EP US); **C09K 11/64** (2013.01 - KR); **C09K 11/77348** (2021.01 - EP KR US); **C04B 2235/3891** (2013.01 - EP US); **C04B 2235/3895** (2013.01 - EP US); **C04B 2235/40** (2013.01 - EP US); **C04B 2235/401** (2013.01 - EP US); **C04B 2235/402** (2013.01 - EP US); **C04B 2235/428** (2013.01 - EP US); **C04B 2235/46** (2013.01 - EP US); **C04B 2235/5436** (2013.01 - EP US); **C04B 2235/5481** (2013.01 - EP US); **C04B 2235/6562** (2013.01 - EP US); **C04B 2235/6581** (2013.01 - EP US)

Cited by
EP2767572A4; US9758720B2; US9534169B2; WO2014187624A1; WO2011001359A1

Designated contracting state (EPC)
DE

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2022834 A1 20090211; **EP 2022834 A4 20111123**; CN 101448914 A 20090603; CN 101448914 B 20121003; CN 102816566 A 20121212; KR 101390731 B1 20140430; KR 20090018903 A 20090224; TW 200811269 A 20080301; TW I422667 B 20140111; US 2009140205 A1 20090604; US 2012171360 A1 20120705; US 8123980 B2 20120228; US 8636920 B2 20140128; WO 2007135975 A1 20071129

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EP 07743638 A 20070518; CN 200780018264 A 20070518; CN 201210295788 A 20070518; JP 2007060203 W 20070518; KR 20087027538 A 20070518; TW 96117809 A 20070518; US 201213343888 A 20120105; US 30147007 A 20070518